Safety Data Sheet

Section 1. Identification

Product name : **ALPHA® RMA-7 LV PASTE FLUX**

Product code : 240625

Product type : Solid.

Date of issue/Date of revision : January 24 2020.

Manufacturer - Supplier	Telephone no.:	Emergency phone:
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Active Components (NZ) Ltd (Distributor) 2/14 Canaveral Drive Rosedale (0632), Auckland New Zealand	Tel: +64 9 443 9500	National Poisons Centre Free Phone: 0800 764 766 (0800 POISON) INTERNATIONAL, CALL Carechem 24: +65 3158 1074

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Section 2. Hazards identification

Classification of the substance or mixture : ACUTE TOXICITY (oral) - Category 5
ACUTE TOXICITY (dermal) - Category 5
ACUTE TOXICITY (inhalation) - Category 3
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1B
AQUATIC HAZARD (LONG-TERM) - Category 4

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Toxic if inhaled.
May be harmful if swallowed or in contact with skin.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause genetic defects.
May cause cancer.
May cause long lasting harmful effects to aquatic life.

Precautionary statements

Prevention : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear protective clothing. Wear eye or face protection. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing dust. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response : IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage : Store locked up.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Prolonged or repeated contact may dry skin and cause irritation.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Rosin/Resin	40-50	-
Proprietary Glycol	20-30	-
Rosin/Resin	10-20	-
Thickening agent	1-10	-
Thixotrope	1-10	-
Thixotrope	1-10	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 30 minutes, keeping eyelids open. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 15 minutes. Get medical attention. If necessary, call a poison center or physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Toxic if inhaled.

Skin contact : May be harmful in contact with skin. Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

Ingestion : May be harmful if swallowed.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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Section 4. First aid measures

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that mists are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : This material may cause long lasting harmful effects to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Continued on next page

Section 6. Accidental release measures

Large spill : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Storage temperature: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Rosin/Resin	**ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer.**
Proprietary Glycol	**ACGIH TLV (United States, 3/2017).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Thickening agent	**ACGIH TLV (United States, 3/2017). Notes: Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL.** TWA: 525 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
Thixotrope	**ACGIH TLV (United States, 6/2007).** TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total
Thixotrope	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable

Continued on next page

Section 8. Exposure controls/personal protection

	TWA: 3 mg/m³ Form: Respirable

Ingredient name	Exposure limits
Rosin/Resin	**ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer.**
Proprietary Glycol	**ACGIH TLV (United States, 3/2017).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Thickening agent	**TW Minstry of Labor, labor permissible workplace exposure standards, allowable concentration (Taiwan, 6/2014).** STEL: 656.25 mg/m³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 525 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
Thixotrope	**ACGIH TLV (United States, 6/2007).** TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total
Thixotrope	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable TWA: 3 mg/m³ Form: Respirable

Ingredient name	Exposure limits
Rosin/Resin	**ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer.**
Proprietary Glycol	**ACGIH TLV (United States, 3/2017).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Thickening agent	**ACGIH TLV (United States, 3/2017). Notes: Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL.** TWA: 525 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
Thixotrope	**ACGIH TLV (United States, 6/2007).** TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total
Thixotrope	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable TWA: 3 mg/m³ Form: Respirable

Ingredient name	Exposure limits
Rosin/Resin	**ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer.**
Proprietary Glycol	**ACGIH TLV (United States, 3/2017).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Thickening agent	**ACGIH TLV (United States, 3/2017). Notes: Substances for which the TLV is higher than the OSHA Permissible Exposure Limit (PEL) and/or the NIOSH Recommended Exposure Limit (REL). See CFR 58(124) :36338-33351, June 30, 1993, for revised OSHA PEL.** TWA: 525 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

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Section 8. Exposure controls/personal protection

Thixotrope	**ACGIH TLV (United States, 6/2007).** TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total
Thixotrope	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable TWA: 3 mg/m³ Form: Respirable

Ingredient name	Exposure limits
Rosin/Resin	**DOSH USECHH (Malaysia, 4/2000). Skin sensitizer.**
Proprietary Glycol	**ACGIH TLV (United States, 3/2017).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Thickening agent	**DOSH USECHH (Malaysia, 4/2000).** TWA: 525 mg/m³ 8 hours. TWA: 100 bpj 8 hours.
Thixotrope	**ACGIH TLV (United States, 6/2007).** TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total
Thixotrope	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable TWA: 3 mg/m³ Form: Respirable

Ingredient name	Exposure limits
Rosin/Resin	**ACGIH TLV (United States, 3/2017). Skin sensitizer. Inhalation sensitizer.**
Proprietary Glycol	**ACGIH TLV (United States, 3/2017).** TWA: 10 ppm 8 hours. Form: Inhalable fraction and vapor
Thickening agent	**Workplace Safety and Health Act (Singapore, 2/2006).** PEL (long term): 525 mg/m³ 8 hours. PEL (long term): 100 ppm 8 hours.
Thixotrope	**ACGIH TLV (United States, 6/2007).** TWA: 3 mg/m³ Form: Respirable TWA: 10 mg/m³ Form: Total
Thixotrope	**ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Inhalable TWA: 3 mg/m³ Form: Respirable

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

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Section 8. Exposure controls/personal protection

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

Physical state : Solid. [Paste.]

Color : Brown.

Odor : Acrid.

Odor threshold : Not available.

pH : Not available.

Melting point : Not available.

Boiling point : Not available.

Flash point : Closed cup: 182°C (359.6°F)

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Not available.

Vapor pressure : Not available.

Vapor density : Not available.

Relative density : 1

Solubility : Partially soluble in the following materials: cold water and hot water.

VOC 300.3 g/l

Partition coefficient: n-octanol/water : Not available.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Not available.

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Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Other Hazardous decomposition products : carbon oxides (CO, CO_2)

Section 11. Toxicological information

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Rosin/Resin	LD50 Oral	Mouse	2.2 g/kg	-
	LD50 Oral	Rat	3 g/kg	-
Proprietary Glycol	LD50 Dermal	Rabbit	2700 mg/kg	-
	LD50 Oral	Rat	4500 mg/kg	-
Rosin/Resin	LC50 Inhalation Dusts and mists	Rat	0.585 mg/l	6 hours
	LD50 Dermal	Rabbit	>2500 mg/kg	-
	LD50 Oral	Mouse	>4000 mg/kg	-
	LD50 Oral	Rat	>4000 mg/kg	-
Thickening agent	LC50 Inhalation Vapor	Rat	>5500 mg/m³	4 hours
	LD50 Oral	Rat	>5000 mg/kg	-
Thixotrope	LD50 Oral	Rat	>5 g/kg	-
Thixotrope	LD50 Oral	Rat	>5 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Proprietary Glycol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
Thickening agent	Eyes - Mild irritant	Human	-	100 parts per million	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

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Section 11. Toxicological information

Aspiration hazard

Name	Result
Thickening agent	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Toxic if inhaled.

Skin contact : May be harmful in contact with skin. Defatting to the skin. May cause skin dryness and irritation. May cause an allergic skin reaction.

Ingestion : May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness
dryness
cracking

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : May cause genetic defects.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Continued on next page

Section 11. Toxicological information

Route	ATE value
Oral Dermal Inhalation (vapors)	3510.1 mg/kg 2693.2 mg/kg 3.955 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Proprietary Glycol	Acute LC50 1300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Rosin/Resin Proprietary Glycol Thickening agent	1.9 to 7.7 1 3.16 to 7.06	- - -	high low high

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

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Section 14. Transport information

	UN	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
Additional information	-	-	-

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

Taiwan

SDS complies with the Regulation of Labeling and Hazard Communication of Hazardous Chemicals

List of chemicals reputed to be a "threat of imminent danger" : None of the components are listed.

OSHA Article 29 : None of the components are listed.

OSHA Article 30 : None of the components are listed.

China

SDS complies with the General Rules for Classification and Hazardous Communication of Chemicals GB-13690-2009, GB-30000 series, and GB/T 16438-2008.

List of Goods banned for Importing

None of the components are listed.

Inventory of Hazardous Chemicals

None of the components are listed.

List of Goods banned for Exporting

None of the components are listed.

List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

Inventory of Highly Toxic Chemicals

None of the components are listed.

Catalogue of Hazardous Chemicals of Priority Management

None of the components are listed.

Catalogue of Priority Hazardous Chemicals for Environmental Management

None of the components are listed.

Other China Regulations

Continued on next page

Section 15. Regulatory information

Catalogue of Hazardous Chemicals (2015)
Classification & code of dangerous goods (GB 6944-2012)
Production Safety Law of the People's Republic of China
Law of the People's Republic of China on Prevention and Control of Occupational Diseases
Environmental Protection Law of the People's Republic of China
Regulation on Work Safety Licenses
Classification of transportation packing type of dangerous goods GB/T 15098-2008
General rules for classification and hazardous communication of chemicals GB 13690-2009
List of Dangerous Goods GB12268-2012
Occupational Exposure Limits (OELs) for hazardous chemicals GBZ 2.1-2007
Hazardous Chemicals Safety Management Ordinance China (2013 revised)
Safety data sheet for chemical products: content & order of sections GB/T 16483-2008
Rules for classification and labelling of chemicals GB30000-2013
Guidance on the compilation of safety data sheet for chemical products GB/T 17519-2013

Republic of Korea

A. Regulation according to ISHA

ISHA article 37 (Harmful substances prohibited from manufacture) : None of the components are listed.

ISHA article 38 (Harmful substances requiring permission) : None of the components are listed.

Article 2 of Youth Protection Act on Substances Hazardous to Youth : Not applicable.

Exposure Limits of Chemical Substances and Physical Factors

The following components have an OEL:
Rosin/Resin
Proprietary Glycol
Thickening agent
Thixotrope
Thixotrope

ISHA Enforcement Regs Annex 11-3 (Exposure standards established for harmful factors) : None of the components are listed.

ISHA Enforcement Regs Annex 11-4 (Harmful factors subject to Work Environment Measurement) : The following components are listed: Thickening agent

ISHA Enforcement Regs Annex 12-2 (Harmful Factors Subject to Special Health Check-up) : The following components are listed: Thickening agent

Standard of Industrial Safety and Health Annex 12 (Hazardous substances subject to control) : The following components are listed: Thickening agent

B. Regulation according to Chemicals Control Act

K-Reach Article 20 (Toxic chemicals) : Not applicable

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Section 15. Regulatory information

K-Reach Article 27 (Prohibited) : None of the components are listed.

K-Reach Article 27 (Restricted) : None of the components are listed.

Existing Chemical Substances Subject to Registration : The following components are listed: Proprietary Glycol

CSCA Article 11 (TRI) : None of the components are listed.

CSCA Article 39 (Accident Precaution Chemicals) : None of the components are listed.

C. Dangerous Materials Safety Management Act : Not available.

D. Wastes regulation : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Singapore - hazardous chemicals under government control

None.

Japan

Fire Service Law

Category	Substance name/Type	Danger category	Signal word	Designated quantity
Category IV	Material that contains: Class II petroleums	III	Flammable - Keep Fire Away	1000 L
	Material that contains: Class III petroleums	III	Flammable - Keep Fire Away	2000 L
	Material that contains: Class III petroleums (Water soluble)	III	Flammable - Keep Fire Away	4000 L

Fire Service Law - Obstructive materials : Not listed

Designated combustibles : Not available. **Designated quantity** : Not available.

Maritime Safety Law

Notification Regulating Transportation of Dangerous Materials by Sea

None of the components are listed.

Container class

None of the components are listed.

ISHL

Use of specified chemical substances

None of the components are listed.

Label requirements

Ingredient name	%	Status
Rosin/Resin	≥25 - ≤50	Listed
Proprietary Glycol	≥25 - ≤50	Listed
Thickening agent	≤5.0	Listed

Chemicals requiring notification

Ingredient name	%	Status
Rosin/Resin	≥25 - ≤50	Listed
Proprietary Glycol	≥25 - ≤50	Listed
Thickening agent	≤5.0	Listed
Amine	<1.0	Listed

Carcinogen

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Section 15. Regulatory information

None of the components are listed.

Mutagen

None of the components are listed.

Corrosive liquid : Not listed

ISHL Appendix 1 : Not available.

Lead regulation : Not listed

Prevention of Tetraalkyl Lead Poisoning : Not listed

Harmful Substances Subject to Obtaining Permission for Manufacturing : Not listed

Harmful Substances, Prohibited for Manufacturing : Not listed

Dangerous Substances : Not listed

Organic solvents poisoning prevention : Not available.

Chemical Substances Control Law (CSCL)

Ingredient name	%	Status	
Amine	0.01-1	Priority assessment	
Amine	0.001-0.01	Priority assessment	

Poisonous and Deleterious Substances

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

JSOH Carcinogen : Not listed

Law Concerning Prevention of Pollution of the Ocean and Maritime Disaster : Not available.

Road law : Not available.

List of Specially Controlled Industrial Waste : Not listed

Occupational Safety and Health Law : Not available.

Explosives Control Law

None of the components are listed.

High Pressure Gas Control Law : Not available.

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

International lists

National inventory

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Section 15. Regulatory information

Australia : Not determined.

Canada : At least one component is not listed in DSL but all such components are listed in NDSL.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : All components are listed or exempted.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : All components are listed or exempted.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are listed or exempted.

Viet Nam : Not determined.

Section 16. Other information

History

Date of issue/Date of revision : January 24 2020.

Date of previous issue : June 13 2019.

Version : 2.02

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Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Procedure used to derive the classification

Classification	Justification
Acute Tox. 5, H303	Calculation method
Acute Tox. 5, H313	Calculation method
Acute Tox. 3, H331	Calculation method
Eye Irrit. 2A, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Muta. 1B, H340	Calculation method
Carc. 1B, H350	Calculation method
Aquatic Chronic 4, H413	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.